

A NEW ALOE FROM TANGANYIKA

By G. W. REYNOLDS.

(With Plate XII.)

In October 1940, Mrs. E. M. Tweedie of Endebess, Kenya Colony, collected specimens of this species on sandstone hills at Bukoba, overlooking Lake Victoria, in the North-western Division of Tanganyika Territory. Mrs. Tweedie sent some of those plants to the late Mr. H. B. Christian, who grew them at "Ewanrigg" near Salisbury, Southern Rhodesia.

When one of them subsequently flowered, Mr. Christian photographed it, but no description was drawn up.

On 1st August 1954, I visited Bukoba for the express purpose of investigating this undescribed species, and was fortunate to find numbers of plants in flower on the sandstone hills to the west of Bukoba Harbour, at the locality where Mrs. Tweedie had first discovered them. Photographs were secured and a description drawn up on the spot, while herbarium material gathered then was subsequently contributed to the National Herbarium Pretoria, to Kew and to the East African and Coryndon Museum herbaria in Nairobi.

The species can now be described and figured, and under the name which Mr. Christian provisionally assigned to it.

A. bukobana occurs in fairly large numbers on rocks in shallow pockets of soil, also in fissures on the grey sandstone hills at and near Bukoba, in an area receiving about 60 in. of annual rainfall. Plants sucker freely and form dense compact groups, and are variable in branching of the inflorescence, and in the length and shape of flowers.

In leaf characters, kind of inflorescence and flowers with trigonal indentations above the ovary, *A. bukobana* is nearest allied to *A. Chabaudii* Schonl., which occurs in the Rhodesias, Southern Nyasaland, Mocambique, and South Africa. Compared with *A. Chabaudii*, *A. bukobana* is a smaller plant having smaller leaves and rosettes, and very laxly-flowered racemes.

Aloe bukobana Reynolds. Sp. nov. in Sect. *Aethiopicæ*, *A. Chabaudii* Schonl., affinis.

Planta succulenta, acaulis, caespitosa. *Folia* ca. 16, dense rosulata, lanceolato-attenuata, 30 cm. longa, 8 cm. lata, glaucescentia, immaculata, supra plana, apicem versus canaliculata, subtus convexa; margines sinuato-dentati; dentes detoidei, 4 mm. longi, 10 mm. distantes. *In-*

flourescentia paniculata, 70—90 cm. alta. *Racemi* laxissimi, 30—40 cm. longi. *Bractae* parvae, ovato-acutae, 4 mm. longae, 3 mm. latae. *Pedicelli* 12—14 mm. longi. *Perigonium* 30—35 mm. longum, cylindraceo-trigonum, leviter decurvum, circa ovarium 7—8 mm. diam., supra ovarium leviter trigono-constrictum, deinde apicem versus ampliatus; segmenta exteriora per 7 mm. libera. *Antherae* 1—2 mm. exsertae. *Stigma* demum 2—3 mm. exsertae. *Ovarium* 6 mm. longum, 3·5 mm. diametro.

Tanganyika Territory: North-western Division, Bukoba District, on sandstone hills overlooking Bukoba Harbour and Lake Victoria, alt. 3,900 ft., fl. 1 August 1954, Reynolds 7507 Holotype (PRE), isotypes (K, EA).

Plant succulent, acaulescent, suckering freely and forming small dense groups.

Leaves about 16, densely rosulate, the youngest suberect, older spreading, lanceolate-attenuate, averaging 30 cm. long, 8 cm. broad at base, about 14 mm. thick; *upper surface* dull green with a slight bloom, unspotted, flat low down, very slightly canaliculate towards apex; *lower surface* convex, grey-green, without spots or markings; *margins* sinuate-dentate, armed with firm deltoid brownish-tipped teeth averaging 4 mm. long, 10 mm. distant, the apex a small spine. *Sap* dries yellow.

Inflorescence a branched panicle 70—90 cm. high, erect or suberect, the whole inflorescence slender with slender branches.

Peduncle basally plano-convex and 10 mm. broad, terete upwards, branched below the middle with up to 10 branches, the lowest sometimes with 1—2 branchlets; lowest branch subtended at base by a broadly deltoid subfleshy many-nerved acuminate bract 35 mm. long, 14 mm. broad.

Racemes very laxly flowered, the terminal averaging 30—40 cm. long, narrowly conic-cylindric; the buds grey-green tipped, spreading, with their pedicels more or less horizontally disposed, open flowers nutant to subpendulous; in oblique racemes, flowers spreading laterally each side of the axis, and not secund.

Bracts small, broadly and shortly ovate-acute, 4 mm. long, 3 mm. broad, thin, subscarious, 3-nerved.

Pedicels spreading, averaging 12—14 mm. long.

Perianth dull scarlet, paler at mouth, 30—35 mm. long, cylindric-trigonus, varying from slightly rounded at base to obtusely tapering into the pedicel, and from not stipitate to shortly stipitate, cylindric and 7—8 mm. diam. across the ovary, thence trigonously indented, slightly curved, and enlarging slightly to an open mouth; *outer segments*

free for 7 mm., paler at the margins, with subacute slightly spreading apices; *inner segments* dorsally adnate to the outer for their greater length, broader than the outer, with more obtuse more spreading apices, and with 3 crowded nerves forming a scarlet keel.

Filaments lemon, filiform-flattened, the 3 inner narrower and enghthening before the 3 outer with their *anthers* in turn exserted 1—2 mm.

Style lemon-yellow, with *stigma* at length exserted 3 mm.

Ovary greenish-yellow, 6 mm. long, 3.5 mm. diam. (Plate XII.)

NATIVE NAME: "Nkaka" in the Kihaya tongue of the Bahaya tribe of Bukoba, Tanganyika Territory.

ACKNOWLEDGMENTS.

I am indebted to the South African Council for Scientific and Industrial Research for a travelling grant which enabled me to investigate this and many other species of Aloe in various parts of Tropical Africa.

To Mrs. E. M. Tweedie of "Mutamayo", Endebess, near Kitale, Kenya Colony, I am indebted for plants, and also for a detailed map indicating the precise locality, and for much other assistance.



FIG. 1.



FIG. 2.

FIG. 1. Plant on sandstone hill overlooking Bukoba Harbour and Lake Victoria, North-western Division, Tanganyika Territory. Fl. 1 Aug. 1954. Height 80 cm.

FIG 2. Flowers 1/1 from bud to post-pollination stage.